

(C) WPI / DERWENT

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CPY - UBEI

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FS - CPI

IC - A61K37/50 ; C12N9/02

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M1 - [01] J0 J011 J1 J111 J3 J321 K0 L8 L814 L832 L834 M210 M211 M262 M280
M281 M320 M423 M710 M903 Q233 V735 V802 V811; 1327-U 0502-U

PA - (UBEI) UBE IND LTD

PN - JP2231078 A 19900913 DW199043 000pp

PR - JP19890050007 19890303

XA - C1990-140456

XIC - A61K-037/50 ; C12N-009/02

AB - J02231078 The modified superoxide dismutase (SOD) shows high enzyme holding activity and longer half-life period in blood circulation.

For instance, the modified SOD has about 90% of enzyme holding activity and about 15 hours of half-life period in blood circulation, and thus the modified SOD can maintain high pharmaceutical activity by injection administration.

- The SOD includes SOD of human, cow, spinage, Ceratia, etc. Hyaluronic acid has molecular weight of 4000 to 6000. The ratio of hyaluronic acid per mole of SOD.

- The modified SOD is prepd. e.g. by reacting cyanule chloride with hydroxy gp. of hyaluronic acid, and then reacting the resultant with amino gp. of SOD through triazine ring, or by introducing ester into carboxylic gp. of hyaluronic acid using N-hydroxy succinic acid dicyclohexyl carbodiimide and then reacting the resultant with amino gp. of SOD. (3pp Dwg.No.0/0)

DRL - 1327-U 0502-U

IW - SUPEROXIDEDISMUTASE MODIFIED HYALURONIC ACID HIGH ENZYME HOLD ACTIVE
LONG HALF LIFE BLOOD CIRCULATE

IKW - SUPEROXIDEDISMUTASE MODIFIED HYALURONIC ACID HIGH ENZYME HOLD ACTIVE
LONG HALF LIFE BLOOD CIRCULATE

NC - 001

OPD - 1989-03-03

ORD - 1990-09-13

PAW - (UBEI) UBE IND LTD

TI - Superoxidedismutase modified by hyaluronic acid - has high enzyme holding activity and longer half-life in blood circulation